Grain Transportation Report

A weekly publication of the
Transportation and Marketing Programs/Transportation Services Branch
www.ams.usda.gov/tmdtsb/grain

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Contents

The next release is Dec. 23, '04

Melvin Price Auxiliary Lock Damaged. On October 4, 2004, for reasons still under investigation, the two downstream miter gates on the auxiliary lock at Melvin Price Lock and Dam malfunctioned and caused severe damage to the gates. Melvin Price Lock and Dam is located on the Mississippi River at Alton, Illinois, near St. Louis, Missouri. The damaged gates were removed, and a temporary non-operational gate was installed. The photo (left) shows the empty 600-foot chamber with the temporary steel sectional gate (at top of photo) and accumulated sediments and debris (at bottom of photo).

Fortunately, the main 1,200-foot chamber at Melvin Price is not affected by the damage and is handling all traffic. The incident has not impacted the queue at this time and no abnormal backlogs are occurring. At present, the U.S. Army Corps of Engineers is proposing to transport the damaged gates to a repair facility, and have them re-installed when refurbished. One of the two gates can be seen in the upper left hand portion of the photo. The gates are standing upright on deck barges, but are too tall to be transported away from the site because of insufficient bridge clearances. The Corps is waiting for a special crane that can re-position the 220-ton gates to lay flat on the barges so that they can be transported under bridges. No repair schedules or cost estimates have been made.

Last year, Melvin Price Lock and Dam handled 35 million tons of grain and is the second busiest lock on the Mississippi River. Only Lock and Dam 27, located about 15 miles downstream from Melvin Price, handles more traffic. The main purpose of the auxiliary chamber is to serve as a back-up to the main chamber. If the main chamber at Melvin Price were to become non-operational, all barge traffic would stop at that point of the river. An impasse would be created that would separate nearly 653 miles of the Upper Mississippi River and 348 miles of the Illinois River from the port of New Orleans.
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South Korea Seeks China Corn Due to High U.S. Import Costs. An increase in import costs of U.S. corn due to near-record ocean freight rates is making the South Korean feed producers eager to import Chinese corn. According to a report, the Korea Feed Association is seeking up to 157,000 tons of Chinese corn for arrival during February to early April.

Korean feed producers consume close to seven million tons of corn annually. Almost all the Korean imports are from either China or the United States, depending on price and availability each year. However, the recent surge in the ocean freight rates has encouraged many Korean feed producers to seek Chinese corn in recent weeks despite the burdens of carrying stockpiles. Others are delaying their buying decisions hoping for a decline in shipping costs. Ocean freight rates for the benchmark grain route (U.S. Gulf to Japan) were quoted at $70.37 per metric ton (mt) during the latter part of November, near the record high of $73.61 per mt during the middle of March. According to traders, Chinese corn prices are below those for U.S. corn, in part, because of lower freight rates of shipping from China to Korea.

Although relatively high, ocean freight rates from the U.S. Gulf to Japan route have fallen from $70.37 on November 30, 2004 and were quoted at $62.06 per mt on December 16, 2004. This should be encouraging news to U.S. shippers. In addition, international buyers including South Korean feed producers and international suppliers are facing uncertainty regarding Chinese supplies of corn after March. Buyers and suppliers have to assume risks associated with the expiration of 2004 export quotas at the end of February.
www.balticexchange.com *Surajudeen.Olowolayemo@USDA.gov*

Grain Transportation Indicators

Table 1--Grain transport cost indicators*

	Truck	Rail	Barge	Ocean	
Week ending				Gulf	Pacific
12/15/04	134	327	167	283	309
Compared with last week	↓	↓	↑	↓	↓

*Indicator: Base year 2000 = 100; Weekly updates include truck = diesel ($/gallon); rail = nearby secondary rail market ($/car); barge = spot Illinois River basis (index = percent of tariff rate); and ocean = routes to Japan ($/metric ton)

Source: Transportation & Marketing Programs/AMS/USDA

Table 2--Market update: U.S. origins to export position price spreads ($/bushel)

Commodity	Origin--destination	12/10/2004	12/3/2004
Corn	IL--Gulf	-0.55	-0.50
Corn	NE--Gulf	-0.71	-0.65
Soybean	IA--Gulf	-0.83	-0.78
HRW	KS--Gulf	-1.10	-1.08
HRS	ND--Portland	-1.60	-1.60

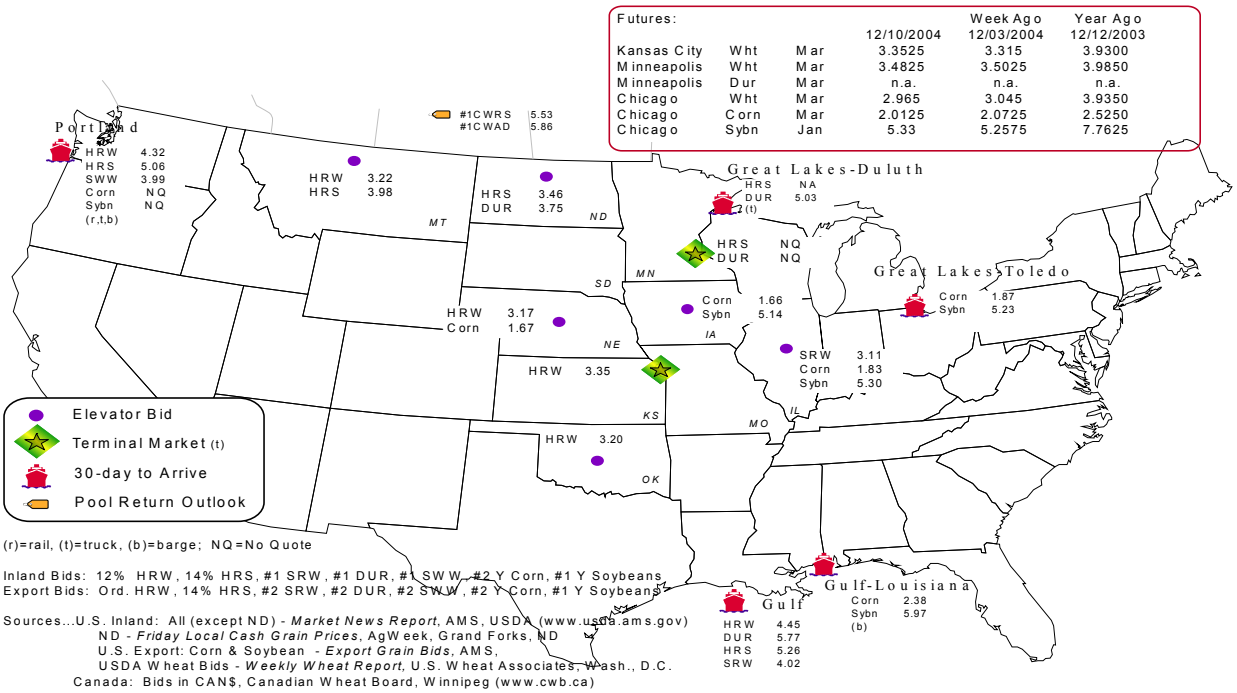
Note: nq = no quote

Source: Transportation & Marketing Programs/AMS/USDA

The **grain bid summary** illustrates the market relationships for commodities. Positive and negative adjustments in differential between terminal and futures markets, and the relationship to inland market points, are indicators of changes in fundamental market supply and demand. The map may be used to monitor market and time differentials.

Figure 1

Grain bid summary



Rail Transportation

Table 3--Rail deliveries to port (carloads)*

Week ending	Mississippi Gulf	Texas Gulf	Cross-Border Mexico	Pacific Northwest	Atlantic & East Gulf	Total
12/08/2004 p	150	803	2,400	3,484	337	7,174
12/01/2004 r	302	1,460	2,038	4,090	496	8,386
2004 YTD	9,975	87,097	61,906	195,744	9,730	364,452
2003 YTD	14,437	82,000	44,080	146,164	18,774	305,455
2004 as % of 2003	69	106	140	134	52	119
Total 2003**	14,843	88,194	48,805	157,125	20,509	329,476
Total 2002	12,247	83,969	40,867	110,471	20,938	268,492

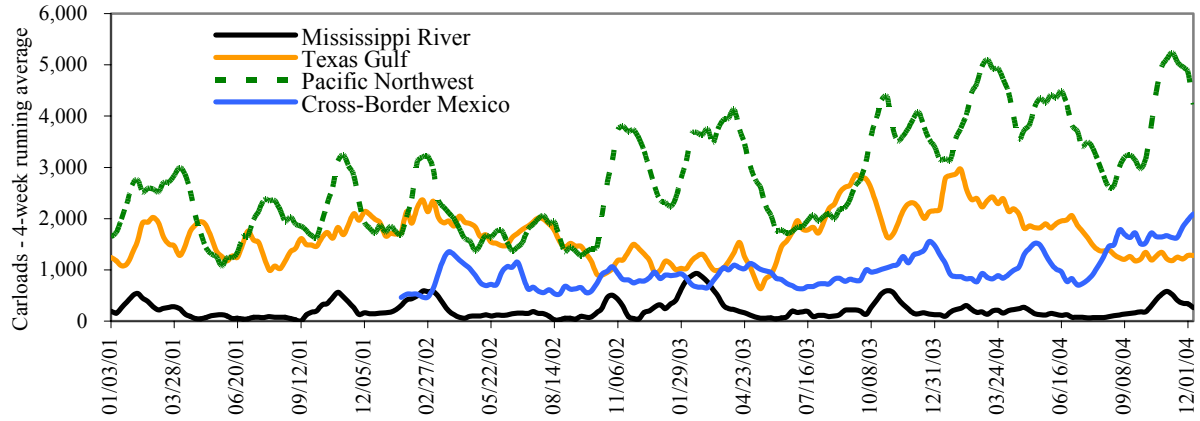
(*) Incomplete Data; as of 9/22/04, Cross-Border movements included; (**) Excludes 53rd week;YTD = year-to-date; p = preliminary data; r = revised data

Source: Transportation & Marketing Programs/AMS/USDA

Railroads originate approximately 40 percent of U.S. grain shipments. Trends in these loadings are indicative of market conditions and expectations.

Figure 2

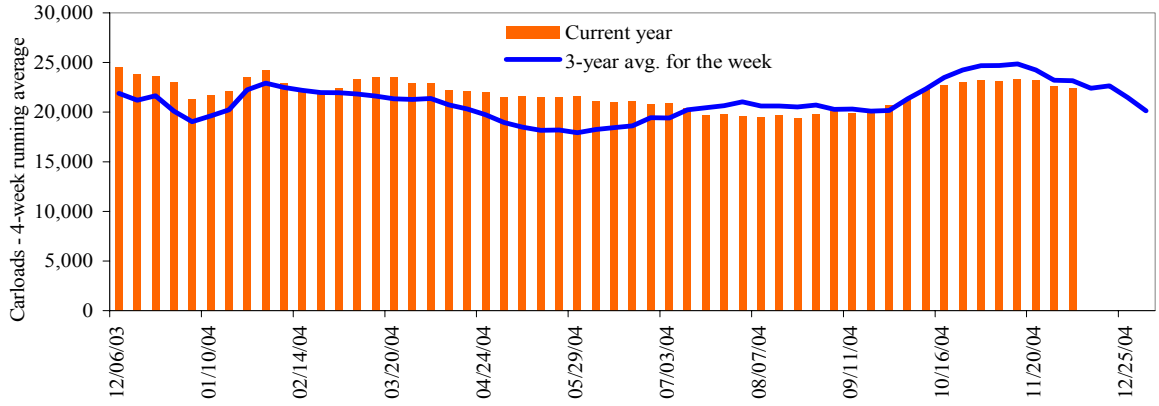
Rail deliveries to port



Source: Transportation & Marketing Programs/AMS/USDA

Figure 3

Total weekly U.S. grain car loadings for Class I railroads



Source: Association of American Railroads

Table 4--Class I rail carrier grain car bulletin (grain carloads originated)

	East		West			U.S. total	Canada	
Week ending	CSXT	NS	BNSF	KCS	UP		CN	CP
12/04/04	2,940	3,649	9,659	470	5,886	22,604	5,360	3,980
This week last year	3,500	4,696	10,378	784	7,548	26,906	5,292	5,216
2004 YTD	131,970	157,801	423,974	25,504	306,063	1,045,312	219,884	193,862
2003 YTD	135,191	159,282	382,118	22,112	311,735	1,010,438	181,076	183,795
2004 as % of 2003	98	99	111	115	98	103	121	105
Total 2003*	146,395	171,260	416,371	24,506	336,079	1,094,611	197,993	198,185

Source: Association of American Railroads (www.aar.org); YTD = year-to-date; * Excludes 53rd week

Table 5--Rail car auction offerings, week ending 12/11/04 ($/car)*

Delivery for:	Jan. 05	Feb. 05	Mar. 05
BNSF[1]			
COT/N. grain	no offer	$153	$26
COT/S. grain	no offer	$143	$89
UP[2]			
GCAS/Region 1	no offer	no offer	$125
GCAS/Region 2	no offer	no offer	$217

*Average premium/discount to tariff, last auction

[1]BNSF - COT = Certificate of Transportation

N includes: ID, MN, MT, ND, OR, SD, WA, WI, WY, and Manitoba, Canada.

S includes: CO, IA, IL, KS, MO, NE, OK, TX, NM, AZ, CA, UT, and NV.

[2]UP - GCAS = Grain Car Allocation System

Region 1 includes: AR, IL, LA, MO, NM, OK, TX, WI, and Duluth, MN.

Region 2 includes: CO, IA, KS, MN, NE, WY, and Kansas City and St. Joseph, MO.

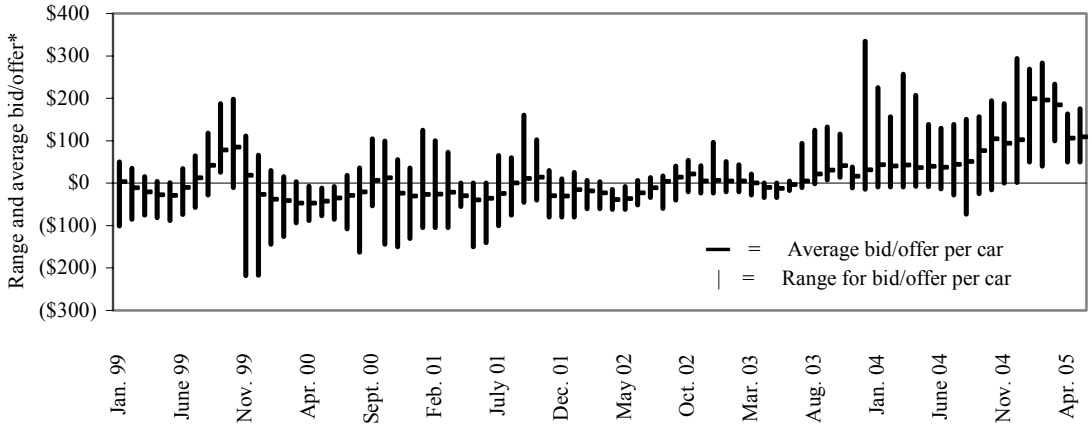
Source: Transportation & Marketing Programs/AMS/USDA

Rail service may be ordered directly from the railroad via **auction** for guaranteed service or tariff for nonguaranteed service or through the secondary market.

The **secondary rail market** information reflects trade values for service that was originally purchased from the railroad carrier as some form of guaranteed freight. The **auction and secondary rail** values are indicators of rail service quality and demand/supply.

Figure 4

Secondary rail car market, delivery month-year



*up to 6 months of trading

Source: Transportation & Marketing Programs/AMS/USDA

Average bid/offer is the simple average of all the weekly bids/offers over the entire period (up to 6 months) for guaranteed railcars that are traded for delivery in a particular month.

Range for bid/offer shows the range of average weekly bids/offers over the entire period (up to 6 months) for guaranteed railcars that are traded for delivery in a particular month.

Table 6--Weekly secondary rail car market, week ending 12/10/04 ($/car)*

	Delivery period			
	Jan. 05	**Feb. 05**	**Mar. 05**	**Apr. 05**
BNSF-GF	$238	$200	$183	$63
Change from last week	-$12	$25	$25	-$12
UP-Pool	$225	$208	$192	$125
Change from last week	-$44	-$64	-$41	-$33

*Average premium/discount to tariff, $/car-last week

Note: Bids listed are market INDICATORS only & are NOT guaranteed prices,
Missing value = no bid quoted; GF = guaranteed freight; Pool = guaranteed pool

Sources: Transportation and Marketing Programs/AMS/USDA

Data from Atwood/ConAgra, Harvest States Co-op, James B. Joiner Co., Tradewest Brokerage Co.

Table 7--Tariff rail rates for unit and shuttle train shipments*

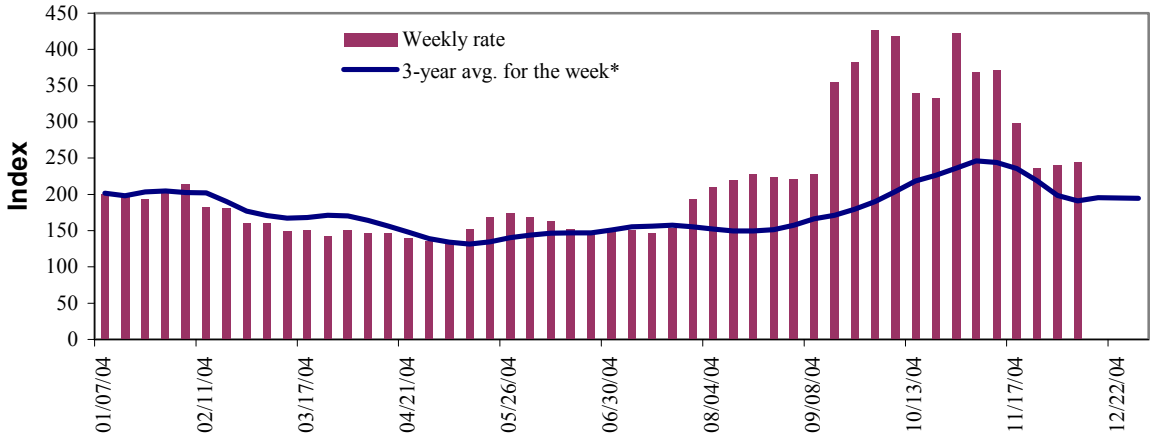
Effective date: 12/6/2004	Origin	Destination	Rate/car	Rate/metric ton	Rate/bushel**
Unit train*					
Wheat	Minneapolis, MN	Houston, TX	$2,120	$23.37	$0.64
	Kansas City, MO	Galveston, TX	$1,920	$21.16	$0.58
	Minneapolis, MN	Portland, OR	$4,148	$45.72	$1.24
	St. Louis, MO	Houston, TX	$2,145	$23.64	$0.64
	Kansas City, MO	Laredo, TX	$2,380	$26.23	$0.71
	Chicago, IL	Albany, NY	$1,834	$20.22	$0.55
	Chicago, IL	Richmond, VA	$2,002	$22.07	$0.60
Corn	Minneapolis, MN	Portland, OR	$3,600	$39.68	$1.01
	Chicago, IL	Baton Rouge, LA	not available	$0.00	$0.00
	Council Bluffs, IA	Baton Rouge, LA	$2,270	$25.02	$0.64
	Evansville, IN	Raleigh, NC	$1,791	$19.74	$0.50
	Council Bluffs, IA	Stockton, CA	$3,606	$39.75	$1.01
	Kansas City, MO	Dalhart, TX	$1,965	$21.66	$0.55
	Columbus, OH	Raleigh, NC	$1,700	$18.74	$0.48
	Des Moines, IA	Laredo, TX	not available	$0.00	$0.00
Soybeans	Minneapolis, MN	Portland, OR	$3,610	$39.79	$1.08
	Chicago, IL	Baton Rouge, LA	not available	$0.00	$0.00
	Council Bluffs, IA	Baton Rouge, LA	not available	$0.00	$0.00
	Des Moines, IA	Laredo, TX	not available	$0.00	$0.00
	Evansville, IN	Raleigh, NC	$1,791	$19.74	$0.54
	Chicago, IL	Raleigh, NC	$2,391	$26.36	$0.72
Shuttle Train*					
Wheat	St. Louis, MO	Houston, TX	$1,895	$20.89	$0.57
	Minneapolis, MN	Portland, OR	$3,993	$44.01	$1.20
Corn	Fremont, NE	Houston, TX	$2,665	$29.38	$0.75
	Minneapolis, MN	Portland, OR	$3,450	$38.03	$0.97
Soybeans	Council Bluffs, IA	Houston, TX	$2,605	$28.71	$0.73
	Minneapolis, MN	Portland, OR	$3,410	$37.59	$0.95

*A unit train refers to shipments of at least 52 cars. Shuttle train rates are available for qualified shipments of more than 100 cars that meet railroad efficiency requirements.

**Approximate load per car = 100 short tons: corn 56 lbs./bu., wheat & soybeans 60 lbs./bu.

Sources: www.bnsf.com, www.cpr.ca, www.csx.com, www.uprr.com

Figure 5
Illinois River barge rate index - quotes



Note: Index = percent of tariff rate; *4-week moving average
Source: Transportation & Marketing Programs/AMS/USDA

The **Illinois River barge rate index** averaged 183 percent of the **benchmark tariff rates** between 1999 and 2001, based on weekly market quotes. The **index**, along with **rate quotes** and **futures market** bids are indicators of grain transport supply and demand.

Table 8--Barge rate quotes: southbound barge freight

Location	12/8/2004	12/1/2004	Jan '05	Mar '05
Twin Cities	0	0	0	0
Mid-Mississippi	245	249	0	225
Illinois River	245	240	254	220
St. Louis	198	175	185	180
Lower Ohio	202	192	192	189
Cairo-Memphis	180	166	172	168

Index = percent of tariff, based on 1976 tariff benchmark rate
Source: Transportation & Marketing Programs/AMS/USDA

Calculating barge rate per ton:
(Index * 1976 tariff benchmark rate per ton)/100

Select applicable index from market quotes included in tables on this page. The 1976 benchmark rates per ton are provided in map (see figure 6).

Note: The Illinois barge rate is for Beardstown, IL, La Grange Lock & Dam (L&D 8).

Figure 6
Benchmark tariff rates

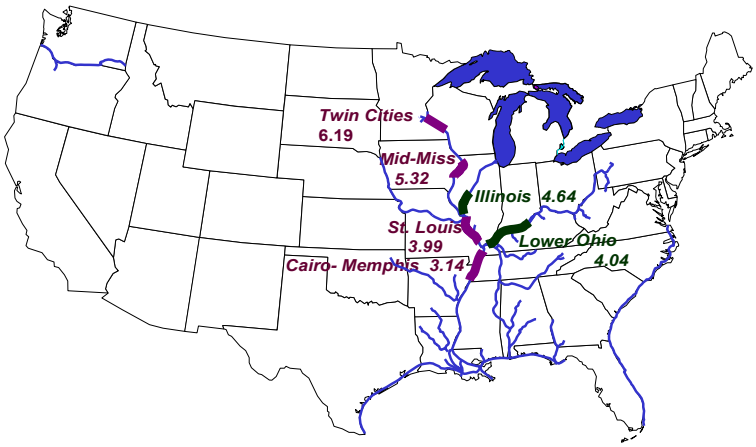
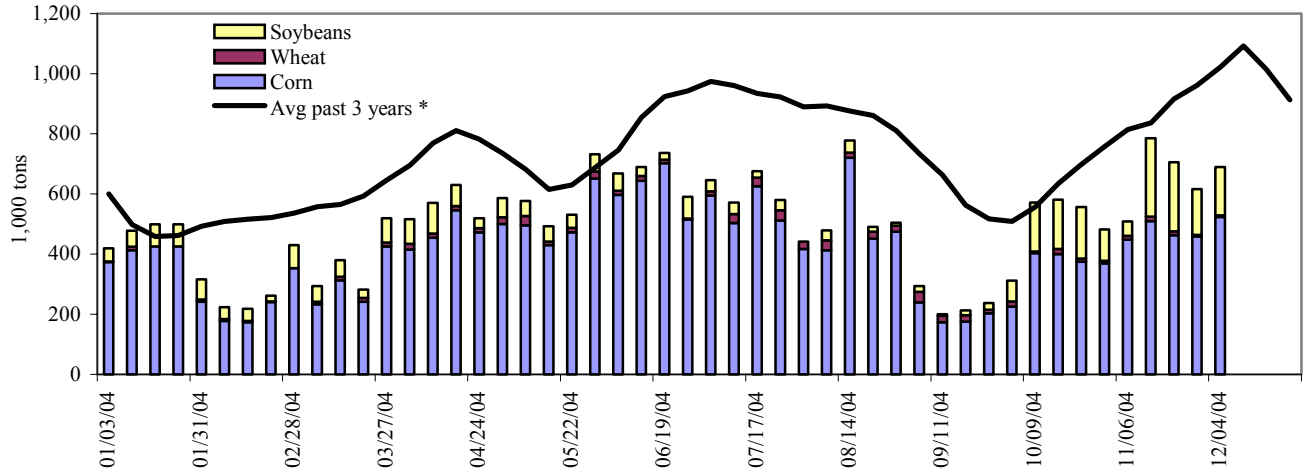


Figure 7

Barge movements on the Mississippi River (Locks 27 - Granite City, IL)



* 4-week moving average

Source: Transportation & Marketing Programs/AMS/USDA

Table 9--Barge grain movements (1,000 tons)

Week ending 12/04/2004	Corn	Wheat	Soybean	Other	Total
Mississippi River					
Rock Island, IL (L15)	151	0	16	0	167
Winfield, MO (L25)	357	0	92	0	450
Alton, IL (L26)	511	6	174	0	691
Granite City, IL (L27)	523	6	160	0	690
Illinois River (L8)	164	5	49	0	217
Ohio River (L52)	69	2	85	39	195
Arkansas River (L1)	0	20	28	0	48
2004 YTD	23,918	2,571	5,733	719	32,942
2003 YTD	27,659	2,652	8,623	636	39,569
2004 as % of 2003 YTD	86	97	66	113	83
Total 2003	29,898	2,787	9,146	695	42,526

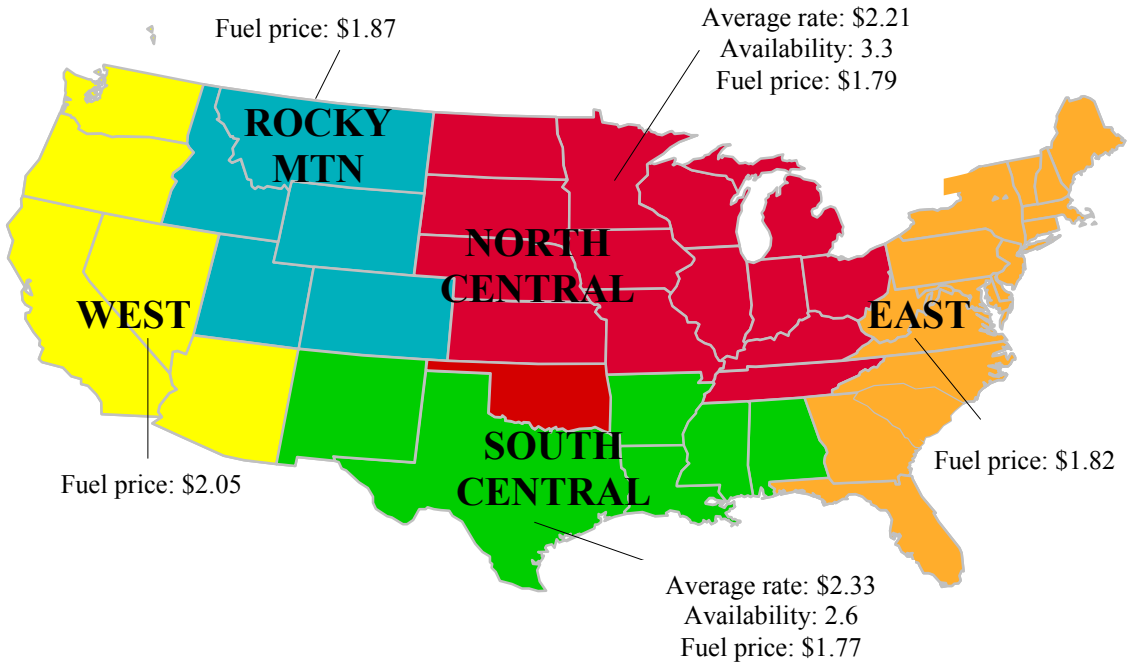
YTD (year-to-date) and calendar year total includes Miss/27, Ohio/52, and Ark/1. "Other" refers to oats, barley, sorghum, and rye.

Source: U.S. Army Corp of Engineers (www.mvr.usace.army.mil/mvrimi/omni/webrpts/default.asp)

Note: Total may not add exactly, due to rounding

Truck Transportation

Figure 8
U.S. grain truck market advisory, 3rd quarter 2004*



*Average rate per loaded mile, based on truck rates for trips of 25, 100, and 200 miles
Note: Fuel prices are a quarterly average (unit per gallon)
Fuel price data source: Energy Information Administration, U.S. Department of Energy, www.eia.doe.gov

Table 10--U.S. grain truck market overview, 3rd quarter 2004

Region/commodity*	25 miles	100 miles	200 miles	Truck availability	Truck activity	Future truck activity
	Rate per mile			*Rating compared to same quarter last year* 1=Very easy to 5=Very difficult	1=Much lower to 5=Much higher	
National average[1]	**2.76**	**2.12**	**1.87**	**3.1**	**3.4**	**3.2**
North Central region[2]	2.76	2.02	1.86	3.3	3.3	3.3
Corn	2.90	2.15	2.18	2.8	2.9	3.1
Wheat	2.43	1.92	1.68	3.6	3.5	3.3
Soybean	2.90	2.15	2.18	2.9	2.9	2.9
South Central region[2]	2.97	2.14	1.87	2.6	3.8	2.9
Corn	2.32	2.12	1.76	3.0	3.8	3.0
Wheat	3.07	2.05	1.81	2.7	3.8	3.0
Soybean	3.35	2.26	2.05	2.2	3.6	2.6

Rates are based on trucks with 80,000 lb weight limit
*Commodity averages based on truck rates for top producing states based on National Agricultural Statistics Service/USDA
[1]National average includes: AR, CO, IA, IL, IN, KS, LA, MN, MS, ND, NE, OH, OK, OR, SD, TX, and WA.
[2]Commodity rates per mile include the average of the top 3 producing states within the region.
Source: Transportation and Marketing Programs/AMS/USDA

The weekly **diesel price** provides a proxy for trends in U.S. truck rates. Diesel fuel is a significant expense for truck grain movements, accounting for 37 percent of the estimated variable cost.

Table 11--Retail on-highway diesel prices*, week ending 12/13/04 (US$/gallon)

			Change from	
Region	**Location**	**Price**	**Week ago**	**Year ago**
I	East Coast	2.063	-0.048	0.570
	New England	2.206	-0.028	0.583
	Central Atlantic	2.184	-0.036	0.582
	Lower Atlantic	1.998	-0.055	0.564
II	Midwest	1.953	-0.080	0.499
III	Gulf Coast	1.910	-0.085	0.473
IV	Rocky Mountain	2.049	-0.075	0.523
V	West Coast	2.097	-0.084	0.458
	California	2.138	-0.087	0.447
Total	U.S.	1.997	-0.072	0.511

*Diesel fuel prices include all taxes.

Source: Energy Information Administration/U.S. Department of Energy (www.eia.doe.gov)

Grain Exports

Table 12--U.S. export balances (1,000 metric tons)

	Wheat						Corn	Soybeans	Total
Week ending 1/	HRW	SRW	HRS	SWW	DUR	All wheat			
12/2/2004	1,511	493	1,293	730	116	4,143	8,624	5,755	18,522
This week year ago	2,831	604	1,189	1,043	206	5,874	10,342	8,681	24,897
Cumulative exports-crop year 2/									
2004/05 YTD	5,129	2,142	4,335	2,926	334	14,866	12,275	10,822	37,963
2003/04 YTD	6,332	2,126	3,639	2,181	621	14,900	12,366	10,667	37,933
2004/05 as % of 2003/04	81	101	119	134	54	100	99	101	100
2003/04 Total	12,697	3,785	6,928	4,889	1,053	29,353	47,704	24,102	101,159
2002/03 Total	6,896	2,899	6,645	3,517	720	20,677	39,646	28,908	89,231

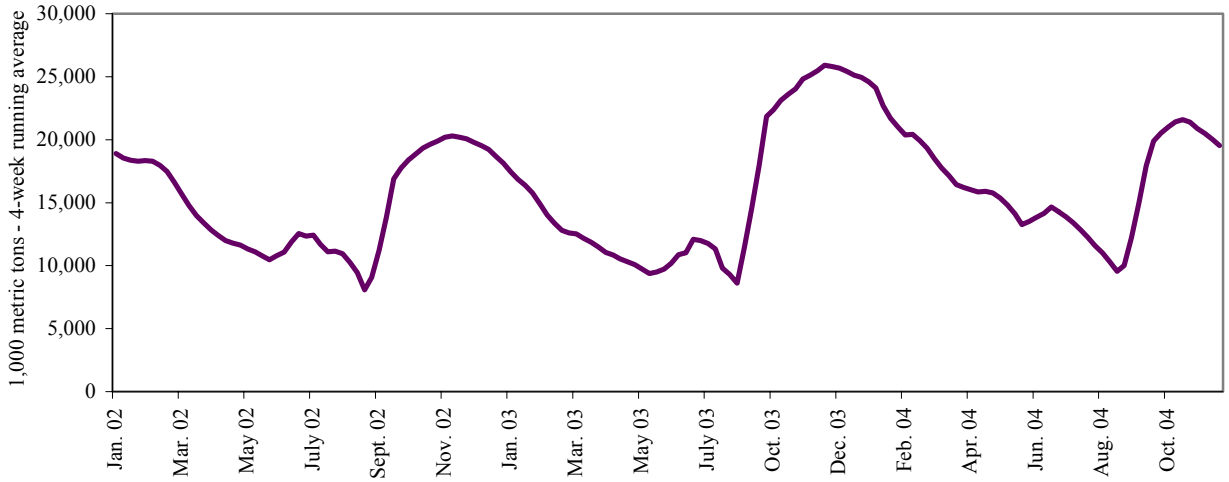
Note: YTD = year-to-date. Crop year: wheat = 6/01-5/31, corn & soybeans = 9/01-8/31, 1/ = Current outstanding unshipped export sales to date

2/ = New crop year in effect for corn and soybean sales

Source: Foreign Agricultural Service/USDA (www.fas.usda.gov)

Figure 9

U.S. grain, unshipped export balances (wheat, corn, and soybean sales)



Source: Foreign Agricultural Service/USDA (www.fas.usda.gov)

Table 13--Select U.S. port regions - grain inspections for export (1,000 metric tons)

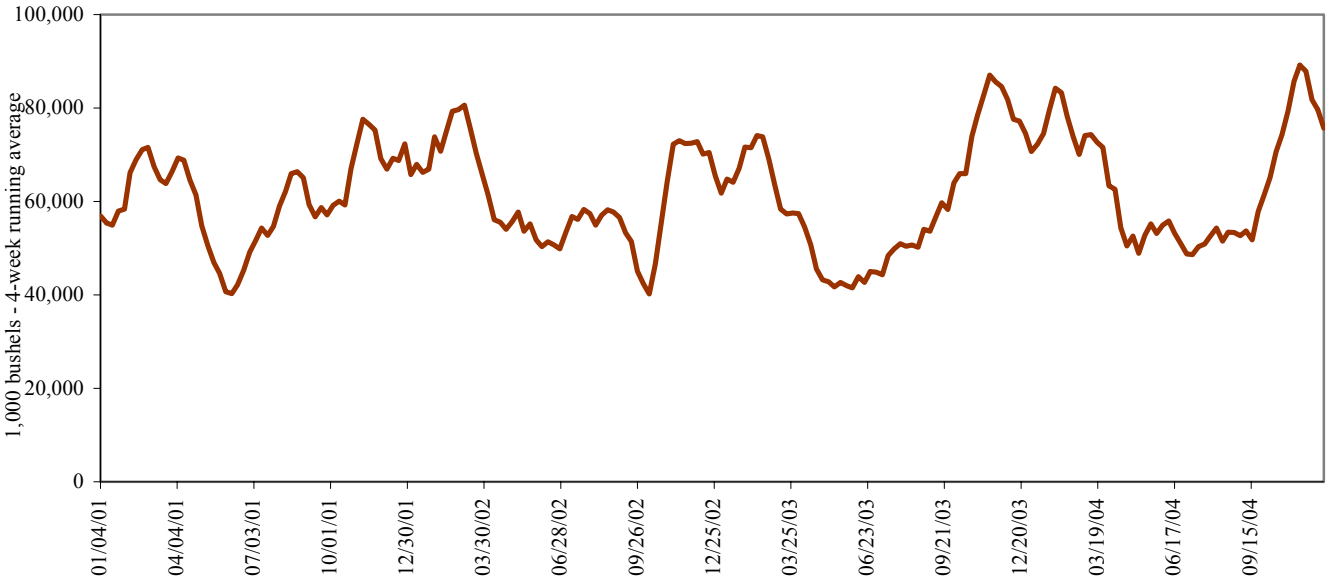
	Pacific Region			Mississippi Gulf			Texas Gulf			Port Region total		
Week ending	Wheat	Corn	Soybeans	Wheat	Corn	Soybeans	Wheat	Corn	Soybeans	Pacific	Mississippi	Texas
12/09/04	113	174	58	116	656	523	51	33	0	346	1,295	84
2004 YTD	11,490	9,261	4,222	6,902	31,121	13,839	7,658	112	18	24,973	51,862	7,788
2003 YTD	8,484	5,146	4,986	5,759	29,346	18,320	6,575	176	65	18,616	53,424	6,815
2004 as % of 2003	135	180	85	120	106	76	116	64	28	134	97	114
2003 Total	8,764	5,450	5,141	5,883	30,903	19,374	7,011	229	69	19,355	56,160	7,309

Source: Federal Grain Inspection Service/USDA (www.usda.gov/gipsa); YTD: year-to-date

The United States exports approximately one-quarter of the grain it produces. On average, it includes nearly 45 percent of U.S.-grown wheat, 35 percent of U.S.-grown soybeans, and 20 percent of the U.S.-grown corn. Over 60 percent of these U.S. export grain shipments departed through the Mississippi Gulf region in 2003.

Figure 10

U.S. grain inspected for export (wheat, corn, and soybeans)



Source: Federal Grain Inspection Service/USDA (www.usda.gov/gipsa)

Ocean Transportation

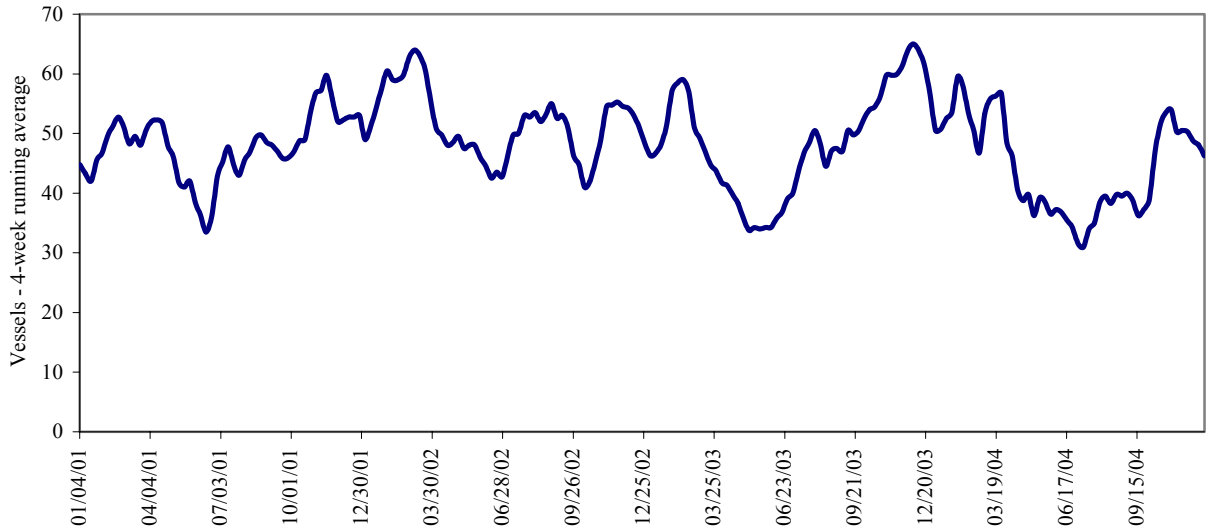
Table 14--Weekly port region grain ocean vessel activity (number of vessels)

	Gulf			Pacific Northwest	Vancouver B.C.
Date	In port	Loaded 7-days	Due next 10-days	In port	In port
12/9/2004	28	44	75	9	6
12/2/2004	28	48	65	10	10
2003 range	(11..47)	(30..76)	(39..93)	(3..13)	(1..15)
2003 avg.	31	49	62	9	6

Source: Transportation & Marketing Programs/AMS/USDA

Figure 11

Gulf Port grain vessel loading (past 7 days)



Source: Transportation & Marketing Programs/AMS/USDA

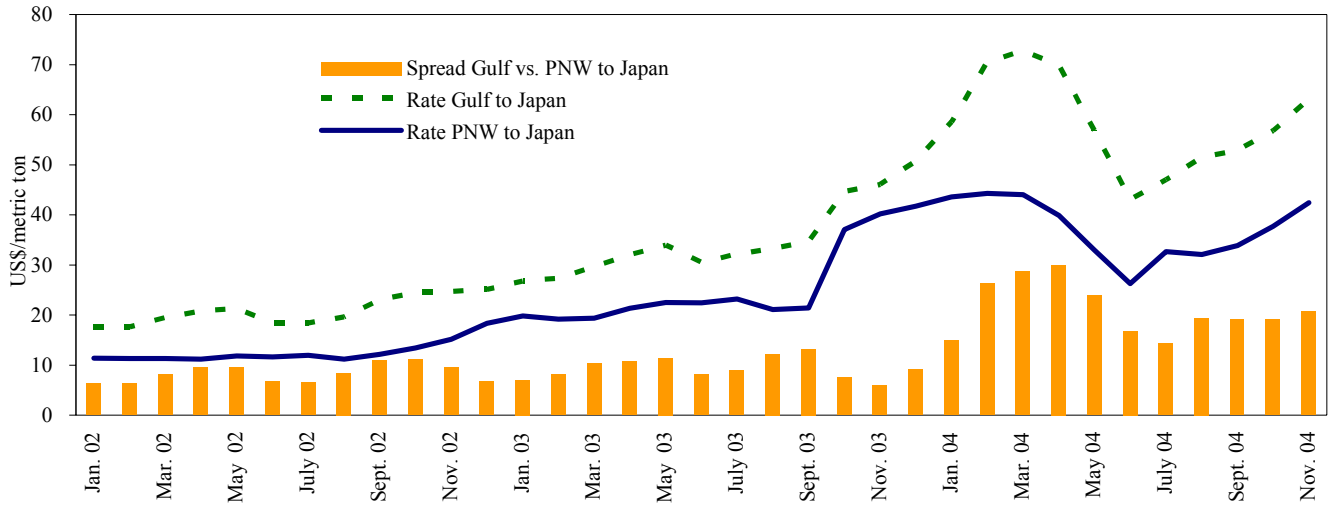
Table 15--Quarterly ocean freight rates (average rates & percentage changes) (US$/metric ton)

Countries/ regions	2004 3rd qtr	2003 3rd qtr	Percent change	Countries/ regions	2004 3rd qtr	2003 3rd qtr	Percent change
Gulf to				**Pacific NW to**			
Japan	$50.08	$33.83	48	Japan	$37.00	---	---
China	$54.00	$34.00	59				
N. Europe	---	$22.88	---	**Argentina/Brazil to**			
N. Africa	---	$25.50	---	Med. Sea	$46.92	$24.50	92
Med. Sea	---	$24.88	---	China	---	$34.75	---

Source: Maritime Research, Inc. (www.maritime-research.com)

Figure 12

Grain vessel rates, U.S. to Japan



Source: Baltic Exchange (www.balticexchange.com)

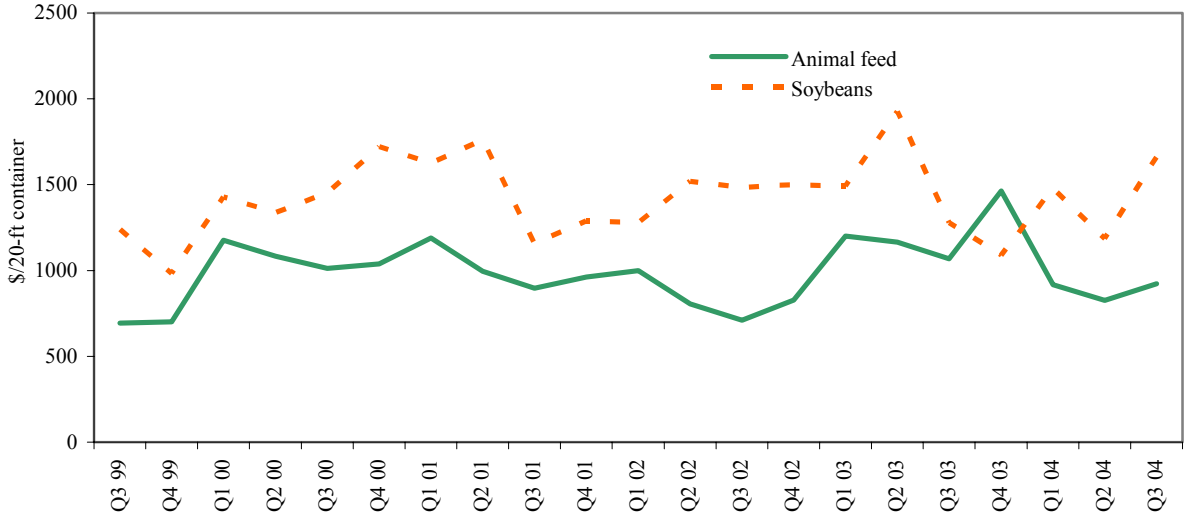
Table 16--Ocean freight rates for selected shipments, week ending 12/11/04

Export region	Import region	Grain	Month	Volume loads (metric tons)	Freight rate ($/metric ton)
U.S. Gulf	Belgium	Hvy Grain	Dec 10/17	40,000	38.00
U.S. Gulf	Japan	Hvy Grain	Nov 25/30	54,000	59.00
U.S. Gulf	China	Hvy Grain	Nov 5/15	57,000	55.00
U.S. Gulf	Japan	Hvy Grain	Dec 1/10	54,000	62.50
Norfolk	Latvia*	Wheatflour	Dec 10/25	3,320	65.00

Rates shown are for metric ton (2,204.62 lbs. = 1 metric ton), F.O.B., except where otherwise indicates; op = option
*Most food aid from the United States is required to be shipped on U.S. flag vessels. The vessels are limited in availability resulting in higher rates. In addition, destinations receiving food aid generally lack adequate port unloading facilities, requiring the vessel to remain in port for a longer duration than normal.
Source: Maritime Research Inc. (www.maritime-research.com)

Figure 13

Weighted average rates[1] for containerized shipments of animal feed and soybeans to selected Asian countries



[1]Animal Feed: Busan-Korea (15%), Kaohsiung-Taiwan (21%), Tokyo-Japan (39%), Hong Kong (22%), Bangkok-Thailand (3%) and soybeans: Busan-Korea (5%), Keelung-Taiwan (31%), Tokyo-Japan (64%)

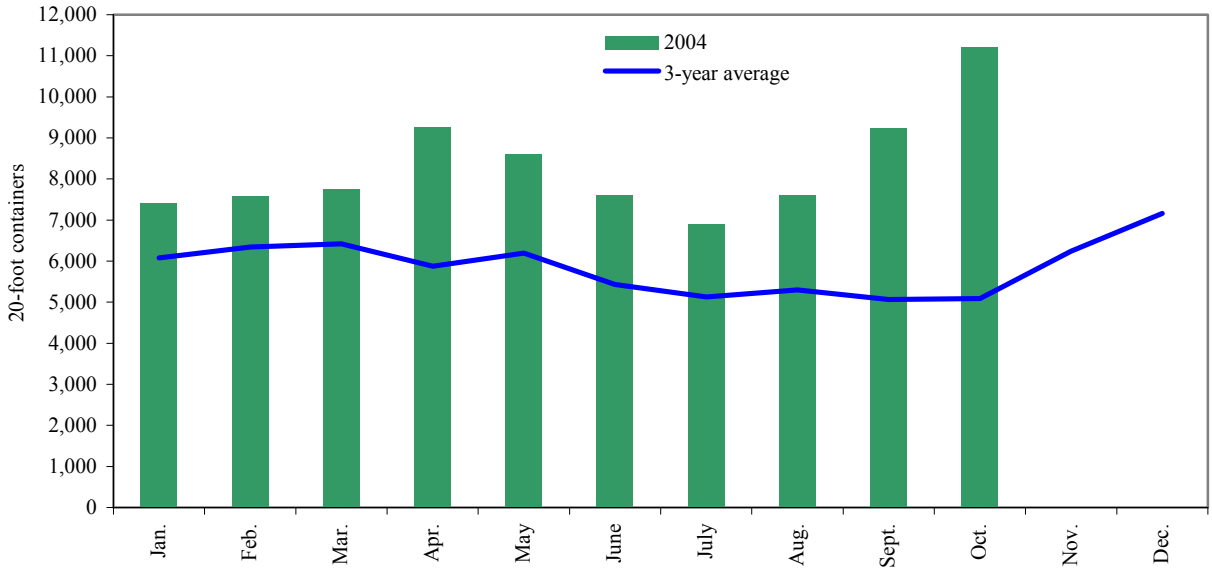
Quarter 3, 2004.

Source: Ocean Rate Bulletin, Transportation & Marketing Programs/AMS/USDA

Container ocean freight rates – average rate per twenty-foot equivalent unit (TEU) weighted by shipping line market share and trade route.

Figure 14

Monthly shipments of containerized grain for 2004 compared with a 3-year average



Note: PIERS data is available with a lag of approximately 40 days

Source: Port Import Export Reporting Service (PIERS), *Journal of Commerce*

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Related Websites

Agricultural Container Indicators	http://www.ams.usda.gov/tmd2/agci/
Ocean Rate Bulletin	http://www.ams.usda.gov/tmd/Ocean/index.asp